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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/892,347    07/14/97    GERSHFELD    J    LB970629

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LM02/0902

EXAMINER
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BROWN, R

ART UNIT	PAPER NUMBER
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2711

DATE MAILED:

09/02/99

3

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
08/892,347

Applicant(s)  
Gershfeld

Examiner  
Reuben M. Brown

Group Art Unit  
2711



☐ Responsive to communication(s) filed on \_\_\_\_\_

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-15 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-15 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims <sup>5-7</sup>~~5-7~~ are rejected under 35 U.S.C. 112, second paragraph as lacking antecedent basis. Claims 5 & 6 recite the limitation "first test signal" in line 4. There is insufficient antecedent basis for this limitation in the claim.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolf, (U.S. Pat # 5,596,364), in view of Nicholas, (U.S. Pat # 4,677,481).

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Considering claim 1, the claimed method for evaluating the degradation of an electrical signal caused by a circuit is disclosed in Wolf, which is directed to a means for measuring the video quality of transmission channels, at least according to the perceptual degradation of a video signal that has passed through a transmission channel, (col. 1, lines 13-24; col. 3, lines 15-55). Wolf discloses in Fig. 3, that a Library of Test Scenes are sent as Source Video 1, to an Impairment Generator 37. The Impairment Generator 37 simulates the degradation that the Source Video 1 might receive as it is passed through a transmission channel 3, and thereby outputs the degraded signal as Destination Video 5. Both the Source Video 1 and Destination Video 5 are transmitted to a Subjective testing means 39, so that the signals may be visually compared by a viewing panel 40, see (Fig. 1; Fig. 3; col. 6, lines 37-56). Even though Wolf is silent as to the specifics of the display of the Subjective testing means 39, one of ordinary skill in the art at the time the invention was made would have been motivated to modify Wolf to place the two video signals side by side on a display apparatus in order to facilitate simultaneous comparison of the two signals. As such, Nicholas introduces a means for simultaneously comparison of two input video signal sources by displaying the instant video sources side by side on a CRT screen; (Abstract; col. 1, lines 30-48; Fig. 1; Fig. 4). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify Wolf with the teachings of Nicholas, for the well known benefit of simultaneous comparison of at least two

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input video sources. Nicholas synchronizes and combines the two input video signals, (col. 2, lines 1-23).

Considering claims 2, 7 & 12, the apparatus of Nicholas provides a waveform monitor, which reads on the claimed oscilloscope, (col. 1, lines 5-35).

Considering claims 3 & 13, wherein the evaluated electrical signal is a video signal, Wolf discloses that the Library of Test Scenes are transmitted video signals, see (Fig. 1; Fig. 3).

Considering claim 4 & 14, Wolf discloses that invention evaluates the degradation of video at least digital encoders & decoders, video storage/retrieval systems, and analog or digital transmission circuits, therefore the known format of the above transmission means at least includes NTSC, PAL, SECAM or computer generated images.

Considering claim 5, the claimed method steps for evaluating and compensating for degradation of an electrical signal caused by an electrical circuit, which correspond with subject matter mentioned above in the rejection of claim 1, are likewise rejected. Regarding the additional claimed limitations of a compensation means, (which inputs the degraded electrical signal) includes adjustment controls such that the adjustment controls are used so that the visual representation of the degraded image is modified to resemble as closely as possible the

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representation of the non-degraded video signal. Even though Nicholas does not specifically disclose adjustment controls, other than a DC restoration means, as pointed out above, Nicholas is directed to the oscilloscope environment, which generally comprise visual adjustment controls. Official Notice is taken, that at the time the invention was it was well known in the art to include a variety of adjustment controls functions on waveform monitors, which enable the user to change an array of visual display characteristics of a video signal, such as amplitude, frequency sweep, focus, etc. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the combination of Wolf and Nicholas, with the well known features of adjustment controls which enable a user to adjust the display characteristics of at least one of the input video signals, for the known benefits of simultaneously viewing the instant plural video sources side by side, with the same or similar *displayed* magnitude or frequency sweep in order to more easily compare the actual differences in the waveforms.

Considering claims 6 & 8, the claimed method steps for evaluating and compensating for degradation of an electrical signal caused by an electrical circuit, which correspond with subject matter mentioned above in the rejection of claim 5, are likewise rejected. Nicholas does not specifically discuss, the use of a signal splitter, so that the compensated degraded video signal may be viewed along with the uncompensated degraded video signal. Nevertheless, using the same argument as cited above with respect to claim 5, one of ordinary skill in the art at the time the invention was made would have been motivated and it would have been obvious to modify the

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combination of Wolf & Nicholas, in order to compare compensated and uncompensated degraded signals, for the well known benefit of determining the magnitude of distortion due to the degradation in a transmission path.

Considering claim 15, Nicholas does not specifically discuss a method for enabling the user to adjust the shape, size and location of video signals. Official Notice is taken, that at the time the invention was made it was well known in the art to include a variety of adjustment controls functions on waveform monitors, which enable the user to change an array of visual display characteristics of a video signal, such as amplitude, frequency sweep, focus, etc. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the combination of Wolf and Nicholas, with the well known features of adjustment controls which enable a user to adjust the display characteristics of at least one of the input video signals, for the known benefits of simultaneously viewing the instant plural video sources side by side with the same or similar *displayed* magnitude or frequency sweep in order to more easily compare the actual differences in the waveforms

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*Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Kafer            Test signal used to calibrate a display apparatus.

B) Judge, Bartelink, Parsons, Efron, Stoker

General transmission path, or circuit testing.

C) Inoue            Enables adjustment/compensation of a test signal.

D) Maycock        Enables comparison of video parameters of reference data, with degraded video data.

E) Thoma           Method of adjusting characteristics of images on an oscilloscope.



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**Any response to this action should be mailed to:**

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Washington, D.C. 20231

**or faxed to:**

(703) 308-9051, (for formal communications intended for entry)

**Or:**

(703) 308-5399 (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

*Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, V.A., Sixth Floor (Receptionist).*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown whose telephone number is (703) 305-2399. The examiner can normally be reached on Monday thru Friday from 830am to 430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380. The fax phone number for this Group is (703) 308-9051.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

  
ANDREW I. FAILE  
SUPERVISORY PATENT EXAMINER  
GROUP 2700